

a) Amendments to the Specification

*The paragraph beginning from line 5, page 1 is amended as follows:*

A1 This is a Continuation of application Serial No. 09/397,577, filed September 16, 1999, which, in turn, claims the benefit of priority of U.S. provisional patent application serial number 60/124,471.

*The paragraph beginning from line 7, page 1 is amended as follows:*

A2 This application claims priority to United States Provisional Patent Application Serial No. 60/119,805 filed on February 12, 1999 and United States Provisional Patent Application Serial No. 60/123,861 filed on March 12, 1999, and United States Patent Application Serial No. 09/397,577, filed on September 16, 1999, and United States Provisional Patent Application Serial No. 60/159,037 filed on October 12, 1999 the content of which is relied upon and incorporated herein by reference in its entirety and the benefit of priority under 35 U.S.C. §§ 119 and 120 is hereby claimed.

*The paragraph beginning from line 6, page 20 is amended as follows:*

A3 Silica soot was doped with fluorine during formation and deposition. In addition to delivering  $\text{SiCl}_4$  to the center forms tube of the combustion burner, fluorine doping source feedstock molecules were delivered to the combustion burner, ~~fluorine doping source feedstock molecules were delivered to the combustion burner~~ in order to form fluorine doped silica. Utilizing soot producing burners such as described in U.S. Patent No. 5,599,371 (Cain et al., February 4, 1997) silica soot doped with fluorine and silicon oxyfluoride glass were formed. Silica soot with 3.5 wt. % F was produced by flowing 1.5 liter/m of  $\text{O}_2$  and 1.5 liter/m of  $\text{CH}_4$  to the flame premix to provide a soft flame. 1 liter/m of  $\text{SiCl}_4$  and 1 liter/m  $\text{CF}_4$  and 2000 cc/m of carrier  $\text{O}_2$  was delivered to the fume tube. Additionally 1 liter/m of  $\text{SF}_6$  was delivered to the innershield to improve F doping. The same delivery rates were used except 10 liter/m  $\text{O}_2$  and 10 liter/m methane was delivered to the flame premix to provide a ~~stranger~~ stronger flame, with the soot deposited as soot preform which was dried with chlorine ~~the consolidated during the consolidation~~ into a the glass with 1 wt. F. Improved silicon oxyfluoride glass may be provided by drying with fluorine and using fluorine treatment gases through consolidation to maintain F levels and avoid Cl contamination. Cl contamination is preferably inhibited by sufficient non-chlorine gas

treatment exposures, preferably F doping gas treatment environments, prior to consolidation.

A3  
cont

---